We claim:

1. A process for producing an aqueous dispersion of a carboxylated cellulose ester, comprising:

i) preparing a liquid mixture comprising:

a) a carboxylated cellulose ester,

b) a volatile hydrophilic organic solvent, having a relative evaporation rate of at least about 1.0, and a solubility in water of at least about 5 weight percent,

c) a coupling solvent, having a relative evaporation rate of less than about 0.5, and a solubility in water of at least about 3 weight percent,

d) a neutralizer, present in an amount sufficient to neutralize at least a portion of the carboxyl groups present on the carboxylated cellulose ester, and

e) water; and

ii) applying heat or vacuum, or both, in an amount sufficient to volatilize the volatile hydrophilic organic solvent, to obtain the aqueous dispersion of the carboxylated cellulose ester.

2. The process according to claim 1, wherein the amount of heat and optional vacuum applied does not substantially volatilize the neutralizer, the water, or the coupling solvent.

3. The process according to claim 1, wherein the heat is applied, and results in a temperature of the liquid mixture no greater than about 75°C.

4. The process according to claim 1, wherein the vacuum is applied in an amount from about 50 mm Hg to about 400 mm Hg.

5. The process according to claim 1, wherein the preparation of the liquid mixture includes a step of dissolving the cellulose ester in one or more of the volatile hydrophilic organic solvent or the coupling solvent.

6. The process according to claim 1, wherein the preparation of the liquid mixture includes a step of mixing the neutralizer with the water.

7. The process according to claim 1, wherein the liquid mixture is prepared by a process comprising:

dissolving the carboxylated cellulose ester in one or more of the hydrophilic organic solvent or the coupling solvent;

adding the neutralizer to the cellulose ester solution; and

adding water to the resulting mixture.

8. The process according to claim 1, wherein the liquid mixture is prepared by a process comprising:

dissolving the carboxylated cellulose ester in one or more of the hydrophilic organic solvent or the coupling solvent;

adding any remaining amount of the hydrophilic organic solvent or the coupling solvent to obtain a cellulose ester solution;

adding the neutralizer to the water; and

adding a mixture of the neutralizer and the water to the cellulose ester solution.

9. The process according to claim 1, wherein the liquid mixture is prepared by a process comprising:

adding the neutralizer to the water;

dissolving the carboxylated cellulose ester in one or more of the hydrophilic organic solvent or the coupling solvent, and afterward adding any remaining amount of solvent, to obtain a cellulose ester solution; and

adding the mixture of neutralizer, or a mixture of the neutralizer and water, to the cellulose ester solution.

10. The process according to claim 1, wherein the liquid mixture is prepared by a process comprising:

dissolving the carboxylated cellulose ester in a blend of the hydrophilic organic solvent and the coupling solvent to obtain a cellulose ester solution;

adding the neutralizer to the cellulose ester solution to obtain a salt solution of the cellulose ester; and

adding the water to the salt solution to obtain the liquid mixture.

11. The process according to claim 1, wherein the preparation of the liquid mixture includes a step of adding the neutralizer to one or more of the hydrophilic organic solvent or the coupling solvent.

12. The process according to claim 1, wherein the preparation of the liquid mixture includes a step of adding the carboxylated cellulose ester to a mixture of the neutralizer and the water.

13. The process according to claim 1, wherein the preparation of the liquid mixture includes a step of adding the carboxylated cellulose ester to the neutralizer.

14. The process according to claim 1, wherein the carboxylated cellulose ester is soluble in the hydrophilic organic solvent at a concentration of at least about 25 percent by weight.

15. The process according to claim 1, wherein the carboxylated cellulose ester is soluble in the hydrophilic organic solvent at a concentration of at least about 40 percent by weight.

16. The process according to claim 1, wherein the hydrophilic organic solvent comprises one or more of methanol, ethanol, propanol, isopropanol, acetone, methyl ethyl ketone, methyl propyl ketone, tetrahydrofuran, or dioxane.

17. The process according to claim 1, wherein the hydrophilic organic solvent has a relative evaporation rate of at least 2.

18. The process according to claim 1, wherein the hydrophilic organic solvent has a relative evaporation rate from about 2 to about 10.

19. The process according to claim 1, wherein the hydrophilic organic solvent has a solubility in water of at least 10 weight percent.

20. The process according to claim 1, wherein the hydrophilic organic solvent is a ketone.

21. The process according to claim 1, wherein the hydrophilic organic solvent comprises one or more of methyl ethyl ketone or acetone.

22. The process according to claim 1, wherein the hydrophilic organic solvent is present in the liquid mixture in an amount from about 1 part per part of carboxylated cellulose ester to about 5 parts per part of carboxylated cellulose ester.

23. The process according to claim 1, wherein the carboxylated cellulose ester is soluble in the coupling solvent at a concentration of at least about 25 percent by weight.

24. The process according to claim 1, wherein the carboxylated cellulose ester is soluble in the coupling solvent at a concentration of at least about 40 percent by weight.

25. The process according to claim 1, wherein the coupling solvent has a relative evaporation rate less than about 0.2.

26. The process according to claim 1, wherein the coupling solvent has a relative evaporation rate from about 0.001 to about 0.5.

27. The process according to claim 1, wherein the coupling solvent has a solubility in water of at least 5 weight percent.

28. The process according to claim 1, wherein the coupling solvent comprises one or more of: ethylene glycol monopropyl ether, ethylene glycol monobutyl ether, 3-methoxybutanol, propylene glycol monopropyl ether, propylene glycol monobutyl ether, diethylene glycol monoethyl ether, diethylene glycol monopropyl ether, diethylene glycol monobutyl ether, dipropylene glycol monopropyl ether, or dipropylene glycol monobutyl ether.

29. The process according to claim 1, wherein the coupling solvent is present in the liquid mixture in an amount from about 0.1 parts per part of carboxylated cellulose ester to about 0.5 parts per part of carboxylated cellulose ester.

30. The process according to claim 1, wherein the neutralizer comprises one or more of ammonia or an amine.

31. The process according to claim 1, wherein the neutralizer comprises one or more of: dimethylethanolamine, triethanolamine, 2-amino-2-methyl-1-propanol, ammonia, piperidine, 4-ethylmorpholine, diethanolamine, ethanolamine, tributylamine, dibutylamine, potassium hydroxide, or sodium hydroxide.

32. The process according to claim 1, wherein the neutralizer is provided in an amount sufficient to neutralize from about 5% to about 50% of the carboxyl moieties on the carboxylated cellulose esters.

33. The process according to claim 1, wherein the neutralizer is provided in an amount sufficient to neutralize from about 10% to about 30% of the carboxyl moieties on the carboxylated cellulose esters.

34. The process according to claim 1, wherein the carboxylated cellulose ester has an acid value from about 10 to about 150.

35. The process according to claim 1, wherein the carboxylated cellulose ester has an acid value from about 20 to about 120.

36. The process according to claim 1, wherein the carboxylated cellulose ester has a degree of ester substitution per anhydroglucose unit from about 1.0 to about 3.0.

37. The process according to claim 1, wherein the carboxylated cellulose ester has a degree of ester substitution per anhydroglucose unit from about 1.3 to about 2.8.

38. The process according to claim 1, wherein the carboxylated cellulose ester is a carboxyalkyl cellulose ester.

39. The process according to claim 1, wherein the carboxylated cellulose ester is a carboxymethyl cellulose ester.

40. The process according to claim 1, wherein the carboxylated cellulose ester has a number average molecular weight from about 1000 to about 50,000.

41. The process according to claim 1, wherein the carboxylated cellulose ester has a number average molecular weight from about 2,000 to about 40,000.

42. The process according to claim 1, wherein the carboxylated cellulose ester is a carboxyalkyl cellulose ester having an inherent viscosity, as measured in a 60/40 (wt./wt.) solution of phenol / tetrachloroethane at 25°C, from about 0.05 to about 2.0

43. The process according to claim 1, wherein the carboxylated cellulose ester comprises a carboxymethyl cellulose acetate butyrate.

44. The process according to claim 1, wherein the carboxylated cellulose ester comprises a carboxymethyl cellulose acetate propionate.

45. The process according to claim 1, wherein the carboxylated cellulose ester comprises one or more of: a carboxymethyl cellulose acetate, a carboxymethyl cellulose butyrate, or a carboxymethyl cellulose propionate.

46. The process according to claim 1, wherein the carboxylated cellulose ester is prepared by reacting a cellulose ester with ozone.

47. The process according to claim 46, wherein the cellulose ester comprises one or more of: cellulose acetate, cellulose propionate, cellulose butyrate, cellulose acetate butyrate, or cellulose acetate propionate.

48. The process according to claim 1, wherein the carboxylated cellulose ester is prepared by reacting cellulose with a dicarboxylic acid.

49. The process according to claim 1, wherein the resulting aqueous dispersion comprises at least 50 percent by weight water.

50. The process according to claim 1, wherein the resulting aqueous dispersion contains no more than 10% by weight organic solvent content.

51. The process according to claim 1, wherein the resulting aqueous dispersion contains no more than 6% by weight organic solvent content.

52. The process according to claim 1, wherein the resulting aqueous dispersion contains no more than about 5% by weight organic solvent content.

53. The process according to claim 1, wherein the resulting aqueous dispersion contains from about 3% to about 10% by weight organic solvent content.

54. The process according to claim 1, wherein the resulting aqueous dispersion contains substantially no surfactant.

55. The process according to claim 1, wherein the resulting aqueous dispersion has a pH of no more than about 7.

56. The process according to claim 1, wherein the resulting aqueous dispersion has a pH from about 3 to about 7.

57. The process according to claim 1, wherein the resulting aqueous dispersion has a mean volume particle size less than about 400 nm.

58. The process according to claim 1, wherein the resulting aqueous dispersion has a mean volume particle from about 50 nm to about 500 nm.

59. The process according to claim 1, wherein the resulting aqueous dispersion has a solids content from about 5% to about 40% by weight.

60. The process according to claim 1, wherein the resulting aqueous dispersion has a solids content from about 10% to about 30% by weight.

61. The process according to claim 1, wherein the resulting aqueous dispersion has an organic solvent content in an amount from about 0.1 parts per part of carboxylated cellulose ester to about 0.5 parts per part of carboxylated cellulose ester.

62. The process according to claim 1, wherein the resulting aqueous dispersion has an organic solvent content in an amount from about 0.15 parts per part of carboxylated cellulose ester to about 0.35 parts per part of carboxylated cellulose ester.

63. An aqueous dispersion of a carboxylated cellulose ester, made by a process comprising:

i) preparing a liquid mixture comprising:

a) a carboxylated cellulose ester,

b) a volatile hydrophilic organic solvent, having a relative evaporation rate of at least 1.0, and a solubility in water of at least about 5 weight percent,

c) a coupling solvent, having a relative evaporation rate of less than about 0.5, and a solubility in water of at least about 3 weight percent,

d) a neutralizer, present in an amount sufficient to neutralize at least a portion of the carboxyl groups present on the carboxylated cellulose ester, and

e) water; and

ii) applying at least one of heat or vacuum, in an amount sufficient to volatilize the volatile hydrophilic organic solvent, to obtain the aqueous dispersion of the carboxylated cellulose ester.

64. An aqueous coating composition, comprising the aqueous dispersion of claim 63.

65. The aqueous coating composition of claim 64, wherein the composition further comprises one or more of: leveling, rheology, and flow control agents; flatting agents; pigment wetting and dispersing agents; surfactants; ultraviolet (UV) absorbers; UV light stabilizers; tinting pigments; defoaming and antifoaming agents; anti-settling, anti-sag and bodying agents; anti-skinning agents; anti-flooding and anti-floating agents; fungicides and mildewcides; corrosion inhibitors; thickening agents; or coalescing agents.

66. The aqueous coating composition of claim 64, further comprising one or more fillers and/or pigments.

67. The coating composition of claim 66, wherein the pigment is comprised of aluminum or mica.

68. A shaped or formed article coated with the composition of claim 64.

69. A pigment dispersion comprising the aqueous dispersion of claim 63, and about 20 to 50 weight percent by weight of a pigment.